



mud

in your

eye

SUMMER 26 EDITION #76

Inside:

GEOLOGY

SOAC

QUIZ



Heavens Above



Volunteer Groups



Wildlife Highlights



Summer 2026

Topic	Pages
Heavens Above	3-4
Feldspar	5-6
Views of a Volunteer	7-8
Holly Blue Butterflies	9
Responsible Fires	10
Wildlife Highlights	11
Summer Events	12
Ranger-led Volunteer Events	13-14
Upcoming Volunteer Task Dates	15
Countryside Volunteers	16
Where in East Lothian	17
Scottish Wildlife Quiz	18
Fun Fact	19

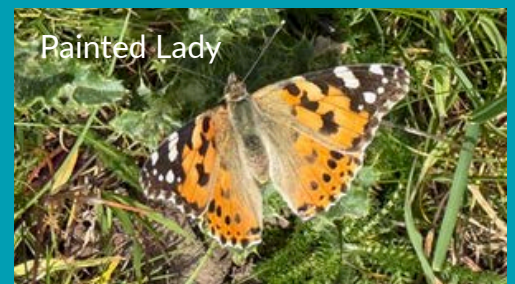
Editorial

The spring certainly provided us with more rain than we saw at the same time last year, but also some much higher temperatures.

We, and wildlife, needed to adjust to the fluctuating weather. We have certainly noticed that the kittiwakes are about two weeks later than normal in laying eggs.

As we head in to the summer we are preparing our sites for the visitors and upcoming school holidays.

Look out for wildlife summer visitors too! Painted lady butterflies have already been spotted and there are carpets of purple milk vetch flowering along the coastal grasslands.



HEAVENS ABOVE

by Roger Powell

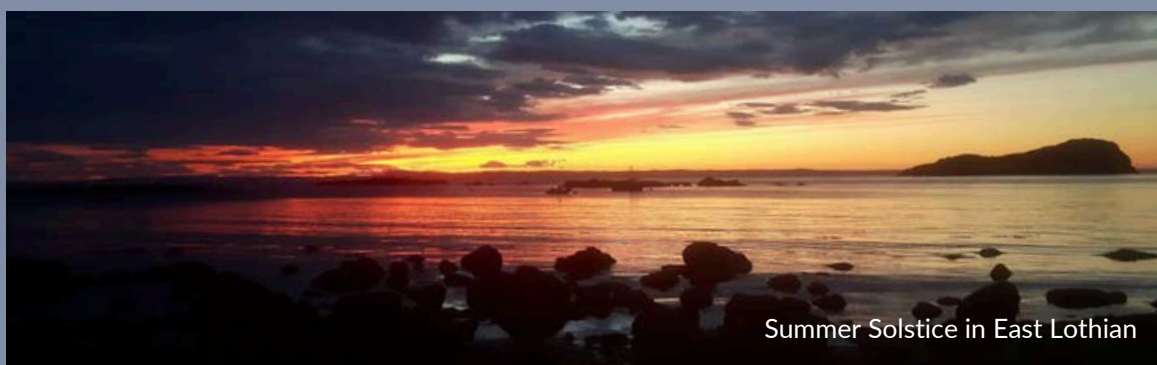
Venus and Jupiter

The highlight this summer must be the Partial Solar Eclipse in August. The date is August 12th and the eclipse will begin at 18:09 and end at 20:00, with the maximum at 19:05. About 90% of the sun will be obscured by the moon then so it should be a spectacular site. Let's hope for clear skies!



In June, Venus and Jupiter will appear close together just after sunset on the 8th. They will be obvious as two bright spots low in the western sky. You will need a clear horizon to see them though.

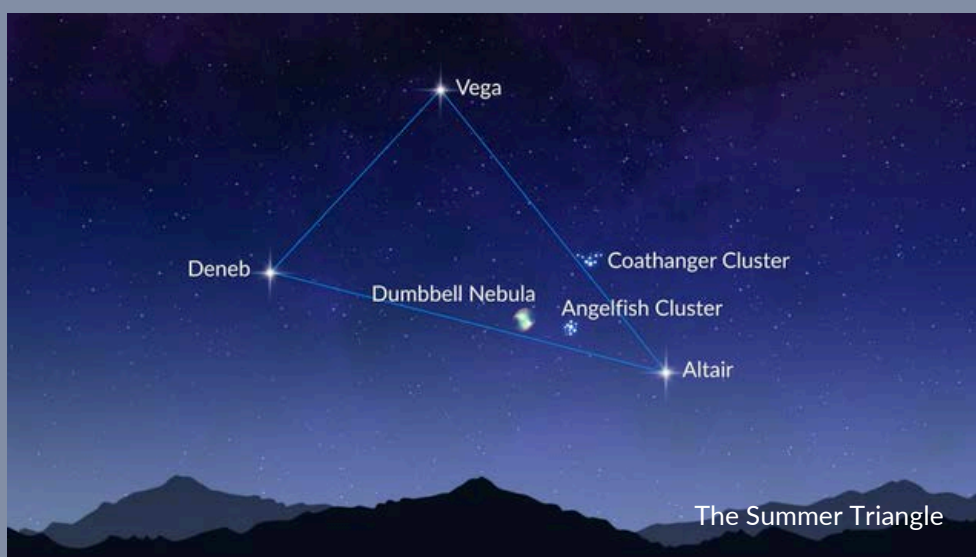
The summer solstice occurs on June 21st, when we will experience the longest amount of daylight in the year. For those nerds like me who like a bit more detail, then the exact moment when the Earth's northern hemisphere is tilted at its most towards the sun will be at precisely 09:24 on June 21st. Be sure to set your alarm.



The Perseid meteor shower is probably the best one of the year. It occurs between 17th July and 24th August, but peaks over the night of August 12th to 13th. There will be a new moon then which means darker skies leading to better viewing conditions. The meteors mostly appear to originate in the constellation of Perseus, hence the name, so looking towards the north-east gives the best chance of seeing them. There can be as many as 100 per hour with the best time being between 2 and 5am, although you should see them at any time the sky is dark enough.



All through the summer and well into autumn, the asterism known as the Summer Triangle is prominent in the night sky. This is formed from three stars in three different constellations. Deneb in Cygnus, Vega in Lyra and Altair in Aquila. Deneb and Vega are the two bright stars almost overhead with Altair being the third star of the triangle lower to the south-east.



Deneb marks the tail end of Cygnus, The Swan. It is well over a thousand light years away but is an incredibly bright blue supergiant. If it was as close as Vega, 25 light years, it would be the brightest star in the sky and bright enough to cast a shadow like the moon.

FELDSPAR

by Richard English

Shap granite headstone in Humble churchyard

Last time around I wrote about quartz, one of the most abundant minerals out there. However, even quartz is a bit on the uncommon side when compared to feldspar – a group of minerals which makes up nearly 60% of the Earth's crust and can be found in most of the rocks around us.

Feldspars are, like quartz, silicate minerals, containing silicon (Si) and oxygen (O) atoms. In the case of the feldspars, aluminium (Al) is also present, alongside some combination of potassium (K), sodium (Na) or calcium (Ca). The classification of the various feldspars is a spectrum based on these latter three chemicals and the amounts of each present. (Don't worry, I'll stop with the chemistry soon). Orthoclase (KAlSi_3O_8), albite ($\text{NaAlSi}_3\text{O}_8$) and anorthite ($\text{CaAl}_2\text{Si}_2\text{O}_8$) are the three extremes of feldspar purity (known as endmembers). Between orthoclase and albite lie the alkali feldspars, whilst the plagioclase feldspars are intermediate between albite and anorthite. It can all be a bit confusing, so, as promised, that's probably enough chemistry.

As mentioned, feldspars are very common and can be found in sedimentary, metamorphic and igneous rocks. In the latter, the presence and relative amounts of various feldspars can be diagnostic. The darker igneous rocks, such as basalt or gabbro, are rich in plagioclase feldspars, along with assorted other minerals. Lighter rocks, like granite, will often contain plagioclase, but will also have much higher alkali feldspar contents. Feldspars can also occur in igneous rocks as phenocrysts – large crystals, set in a finer-grained matrix. These can be found in basaltic lavas on the North Berwick shoreline and elsewhere in East Lothian.



Arkose containing large pink-orange feldspar grains
(credit James St John)



Feldspar phenocrysts in basaltic lava
(credit Anne Burgess)

One fine example of feldspars in igneous rock is the granite quarried at Shap in Cumbria. This is made up of large pink orthoclase crystals set against grey alkali feldspar, translucent quartz and dark mica. It's absolutely beautiful stuff, commonly used for building facings or decorative purposes. Shap granite gravestones are found in churchyards across the county.

In sedimentary rocks, feldspars are fairly ubiquitous, occurring as grains of various sizes in sandstones, mudstones, siltstones and shales. Arkose is a coarse-grained sandstone, which contains over 25% feldspar, along with the usual quartz. It often results from the erosion of feldspar-rich rocks such as granite.

The weathering of feldspars, particularly in the presence of water, produces clay minerals, which play a hugely important role in sedimentary rocks. Briefly dipping back into chemistry (sorry), clay is made up of fine grains of various compounds of aluminium, silicon, oxygen and hydrogen (often with other stuff thrown in for good measure). These minerals are found in fine-grained sedimentary rocks and are also a major component of soils. They also feature in metamorphic rocks such as slate.

Unsurprisingly for such a common mineral, us crafty humans have found a number of ways of making use of feldspars. They are important to processes such as the production of glass and ceramics. Several feldspars, such as labradorite and 'moonstone' (an alkali feldspar) show opalescence and other optical effects and are valued as gemstones. However, despite what some websites might tell you, they probably won't balance your yin and yang energies, or stimulate your psychic perception.



Labradorite crystal
(credit Linus Jouzenas)



Polished moonstone
(credit James St John)



VIEWS OF A VOLUNTEER

by Frank Brown

Frank with Dunbar Conservation Volunteers, second on the left

On retiring from a busy teaching job, and having lived my life in East Lothian, I felt it was time for me to learn more about the county and perhaps make a valued contribution. I felt motivated to enroll with the Scottish Rural College (SRUC) Oatridge, and studied a Wildlife and Conservation Management HNC course, full time for a year. The journey through my college year was demanding, the subjects were both broad and deep in their range and content.



I graduated feeling my knowledge and understanding of rural and urban landscapes, had begun. But what next?

Firstly, I should stress that it's not a requirement to have a qualification to volunteer.

I had previously worked with the Countryside Rangers, in my capacity as a teacher, and knew about their volunteering scheme, it seemed like an opening to get involved.

It was easy to connect with the East Lothian Rangers through their website. As a volunteer, no previous experience was necessary, but a little knowledge would be valuable.

After a short introduction to the essential requirements: health and safety, personal limits and preferences, PPE, work locations and types of activities, the offers to join a group was prompt.

There's no doubt that regardless of the weather, I have always felt a sense of well being working with other volunteers on location.

Any physical limitations of the volunteers are taken into consideration, a volunteer would never be asked to work beyond their limits. So, there's no pressure to do more than you can manage, and enjoying the day is a big priority.

Meeting other volunteers and getting to know them as "work-pals", is a real reward. I have discovered a wealth of experiences listening to stories over a coffee and biscuits. Making connections with other volunteers and nature is a recipe for good mental health.

Every volunteer would agree that making a tangible difference to the natural heritage of the county is essential to mitigate loss of biodiversity and the impact of climate change. Human impact on nature in the county is an ever increasing issue, striking a balance between access and prohibition is always delicate.

Volunteers work hard to ensure visitors can access and enjoy nature responsibly. The Scottish Outdoor Access Code is a guiding document which helps the volunteers plan and maintain our landscape for the benefit of all. Guided by a wealth of Ranger experience, helps turn policy into practice.

If you have the time and energy to volunteer, please consider joining a local team. Help future proof the natural heritage of the county. You'll find that by joining in, you'll gain much more than you can give, now that's a good offer.



HOLLY BLUE BUTTERFLIES

Holly Blue - credit Abbie Marland

Butterfly season is on us, and so too comes that deeply frustrating feeling of not quite catching enough identification detail from a blurry glimpse of a butterfly as it whizzes by on its aerial adventures. If you have been lucky enough, however, to even glimpse a blue butterfly of late, this will likely be one of an expanding population of holly blue butterflies, one of 9 butterfly species to have expanded its range into the county from the south over the last 40 years.

Flitting through head high habitats of gardens and parkland as they peruse the foliage searching for opportunities to egg-lay, bask or drink the sugary rear-end secretions of aphids (and why not!), these early emergers are on the wing much earlier than the superficially similar, and widely encountered common blue, which they share a flight period with later in the year. Also, fortunately for the observer, the holly blue has a reputation for approachability giving the observer a sporting chance of admiring the uniform pale blue wash and black spotting of the under-wing, which lacks the orange detail of the common blue.



Holly Blue - credit Abbie Marland



Common Blue - credit Abbie Marland

The female seeks out holly buds for laying her eggs on in spring, with ivy being the species of choice for the second late summer brood. The only other limiters for their expansion seem to be a suitable climate and the presence of a tiny but parasitic wasp (*Listrodoumus nyctemerus*). It is this deadly wasp that the holly blue has been engaged in an evolutionary struggle with, which, for the moment at least, it seems to be winning.

RESPONSIBLE FIRES

If you are heading outdoors and thinking of having a fire, then please follow this simple advice:

- **STRICTLY NO FIRES IN WOODLANDS - FIRES ON THE BEACH ONLY**
- Wherever possible, use a stove rather than light an open fire.
- If you do wish to light an open fire, keep it small, under control, and supervised.
- Never light an open fire during prolonged dry periods or in areas such as forests, woods, farmland or on peaty ground or near to buildings or in cultural heritage sites where damage can be easily caused.
- Heed all advice at times of high risk.
- Remove all traces of an open fire before you leave.

WELCOME!

extinguish beach fires
& BBQs fully with water

ANTISOCIAL BEHAVIOUR? CALL POLICE SCOTLAND: 101

FIRES

ONLY ON THE
BEACH

INCLUDING
DISPOSABLE
BBQs

East Lothian
Council

**EAST LOTHIAN COUNCIL
COUNTRYSIDE RANGERS**

www.eastlothian.gov.uk/rangers #RespectProtectEnjoy @elcrangers

SCOTTISH
OUTDOOR ACCESS CODE

**KNOW THE CODE
BEFORE YOU GO**

outdooraccess-scotland.com

WILDLIFE HIGHLIGHTS

Spring



Green hairstreak
© Abbie Marland



Firecrest
© Len Hunter



Lesser celandine



Orange tip
© Abbie Marland



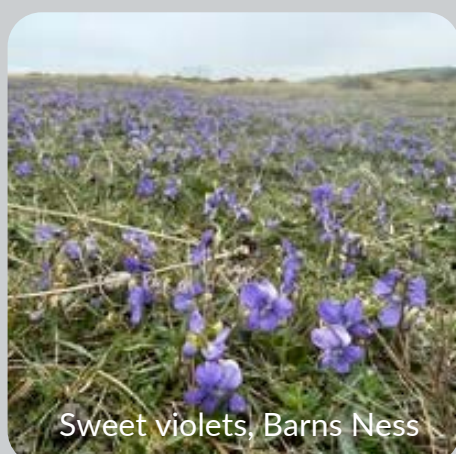
Willow warbler
© Abbie Marland



Yellowhammer
© Abbie Marland



Grey partridge
© Abbie Marland



Sweet violets, Barns Ness



Tadpoles



Rays bream



Sweet cicely



Peacock
© Abbie Marland

EAST LOTHIAN COUNCIL
**UPCOMING
 EVENTS**
 COUNTRYSIDE RANGERS



We run a variety of adult and family events throughout the year. In the summer we focus on the family events, and run adult events the remainder of the year. All our events can be booked here: [Ranger Events](#)



For Families

Date	Time	Event	Information	Where
26 th June	1300-1500	Tree Beating	What lives in our trees?	North Berwick
30 th June	1000-1130	Rockpool Ramble	Discover more about the amazing creatures that live there.	Longniddry
2nd July	0900-1100	 Moth Magic	Come get up close and personal with amazing moths.	Aberlady
3 rd July	1030-1200	Rock School	Find fossilised forests and corals!	Whitesands
15 th July	1030-1200	Minibeast Magic	Learn about the amazing jobs these tiny creatures do!	Prestongrange
17 th July	1100-1300	Pond Dipping	Discover what fascinating creatures live in our freshwater ecosystems.	North Berwick
22 nd July	1330-1500	Rockpool Ramble	Discover more about the amazing creatures that live there.	Dunbar
23 rd July	1300-1430	The Kittiwakes at Dunbar Harbour	A walk around Dunbar castle and cliffs to watch Kittiwakes and their young chicks.	Dunbar
30 th July	1030-1200	Marvelous Minibeast Safari	JoiFind out what wee beasties crawl, scuttle, fly, creep and slither around Archerfield.	Dirleton



RANGER LED VOLUNTEER TASKS

We have a variety of volunteer groups across the county, undertaking a variety of tasks. Here is just some of the work they have been doing during spring:



Dunbar Conservation Volunteers strimming.



Way Out West undertaking repairs at Sandy Walk and planting at Wallyford Bing.



Longniddry-Gullane Conservation Volunteers wildflower and hedge planting.



Friends of Yellowcraig removing scrub and tree saplings from the dunes.



Path Wardens at Thorntonloch repairing the willow banking.



Tyne Team cutting back the Tyne path.



North Berwick Conservation Volunteers clearing discarded fishing gear.



VOLUNTEER TASK DATES

Volunteer Group	When	Time
Aberlady Volunteers	First Wednesday of the month	0930-1500
Friends of Yellowcraig	First Thursday of the month	0930-1500
North Berwick Conservation Volunteers	Second Thursday of the month	1000-1300
Longniddry & Gullane Volunteers	Third Tuesday of the month	1000-1300
Way Out West	Second last Wednesday of the month	1000-1300
Friends of Levenhall Links	Last Tuesday of the month	1000-1300
Dunbar Conservation Volunteers	Last Wednesday of the month	1000-1300

EAST LOTHIAN'S COUNTRYSIDE VOLUNTEERS



East Lothian Countryside Volunteers are a group of over 250 volunteers who help look after the countryside in East Lothian either independently or through ranger-led tasks.

Recent updates:

- ELCV is considering new avenues of funding for countryside projects within the County.
- Notice boards at Pencraig Hill and John Muir Country Park are being designed.
- ELCV has been involved in discussions about the fundraising for repairs to the North Berwick Law path.
- ELCV has financed sets of binoculars for use for education groups with Ranger supervision.
- Further extension of the path North from Tynninghame village is planned and grant award applications framed.



Dunbar Conservation Volunteers after clearing abandoned fishing gear.

CONTACT US

Email: contact@elcv.co.uk

Facebook: [ELCV](#)

Visit: www.elcv.org.uk/



WHERE IN EAST LOTHIAN?

Can you work out where in East Lothian these churches are?

Answers on page 19.



Did you know...

Red phone boxes were designed by Sir Giles Gilbert Scott.





QUIZ

SCOTTISH WILDLIFE

Largest & Smallest

1. Which bird has the largest wingspan in Scotland?
2. What is the largest member of the grouse family?
3. What is Scotland's smallest mammal?
4. What is Scotland's largest member of the weasel family?
5. What is the largest fish in Scottish Waters?
6. What is Scotland's smallest bird?
7. What is Scotland's smallest resident butterfly?
8. What is Scotland's largest land mammal?
9. St Kilda is home to the largest colony of which bird?
10. What is the largest species of dolphin in the world?



1. White-tailed sea eagle 2. Capercaillie 3. Pygmy shrew 4. Badger 5. Basking shark
6. Goldcrest 7. Small blue 8. Red deer 9. Puffins 10. Orca

ANSWERS

FUN FACT



Holly blue populations fluctuate enormously from year to year as they are parasitised by an ichneumon wasp which kills the larval stage. In turn, the decreased number of adults affects populations of the parasite, allowing time for holly blue populations to recover and the cycle to start again.

ANSWERS TO 'WHERE IN EAST LOTHIAN'
A Oldhamstocks B Athelstaneford C Stenton D Ormiston

We'd love to hear from you!

Email us at ranger@eastlothian.gov.uk

Or follow us...

 @ELCrangers

 East Lothian Council Countryside Rangers

